



Metropolitan Edison Company
Post Office Box 480
Middletown, Pennsylvania 17057

Writer's Direct Dial Number

April 9, 1981
LL2-81-0090

1981 APR 13 AM 10 46

U.S. NUCLEAR
REGULATORY COMMISSION

TMI Program Office
Attn: Mr. Lake Barrett, Deputy Director
U. S. Nuclear Regulatory Commission
c/o Three Mile Island Nuclear Station
Middletown, Pennsylvania 17057

Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Groundwater Monitoring Program

The following groundwater monitoring data are attached:

1. Computer tables (Tables 1 and 2) of all tritium data up to and including February 11, 1981.
2. Computer tables (Tables 3 and 4) of gamma scan data up to and including March 11, 1981.
3. Individual computer graphs of tritium concentration for each monitoring station.
4. A graph showing the gamma scan results from Monitoring Station MW-2.
5. A composite drawing showing all monitoring station locations with a graph of the tritium concentration for each station.

Groundwater level data and precipitation data are being prepared in computer storage so that computer tables and graphs of this date can be supplied in future reports.

There was no substantial changes in the tritium concentrations over the reporting period, as is shown on the composite drawing. As shown on the gamma scan graph for Monitoring Station MW-2, the Cs-134/137 levels have substantially dropped below the peak recorded on February 11, 1981.

In order to reduce the sediment load in samples from pumped monitoring stations and to establish a uniform sampling technique, we plan to sample all monitoring stations by the bailing technique.

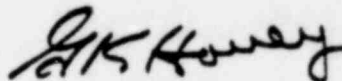
810417037

R

A007
S
1/1
APERTURE
DIST
DRAWINGS TO:
FILES

Also, in order to consolidate our efforts in the broad area of containment building leak detection, we plan to incorporate the Groundwater Monitoring Program into a newly formed Containment Integrity Assessment Program.

Sincerely,



G. K. Hovey
Vice-President and
Director, TMI-2

GKH:JJB:djb

Attachments

cc: Dr. B. J. Snyder, Program Director-TMI Office

Table 1

REPORT NO. 18
 DATE: March 19, 1981
 PAGE 1 OF 3

ENVIRONMENTAL CONTROLS GROUP
 TRITIUM CONCENTRATION (PCI/L)

DATE	N.U. 1	N.U. 2	N.U. 3	N.U. 4	N.U. 5	N.U. 6	N.U. 7	N.U. 8
OF SAMPLE	+/-	H-3	+/-	H-3	+/-	H-3	+/-	H-3
January 25, 1980				170	70			
February 20, 1980			890	90				
February 25, 1980	1530	150						
February 29, 1980						280	90	
March 5, 1980				250	90			
March 7, 1980								160
March 11, 1980	200	90						
March 26, 1980				200	80		300	80
March 27, 1980			370	80	380	80		
March 27, 1980			660	110				
March 28, 1980	2500	190				900	100	
March 28, 1980						560	100	
April 1, 1980	900	100						
April 2, 1980	1550	100	300	80		430	80	870
April 2, 1980	1770	140	240	90		310	80	
April 3, 1980					290	70		
April 3, 1980					300	70		
April 9, 1980	150	50	770	110	80	70	260	90
April 11, 1980								640
April 12, 1980								
April 13, 1980								
April 14, 1980								
April 15, 1980								
April 16, 1980								
April 17, 1980								

dupes 8103300264

POOR ORIGINAL

Table 1 (cont'd)

REPORT NO. 18
DATE: March 19, 1981
PAGE 2 OF 3

GPU ENVIRONMENTAL CONTROLS GROUP
TRITIUM CONCENTRATION (PCI/L)

DATE	M.U. 1	M.U. 2	M.U. 3	M.U. 4	M.U. 5	M.U. 6	M.U. 7
DATE	H-3	H-3	H-3	H-3	H-3	H-3	H-3
April 18, 1980	120	838	320	284	120	196	160
April 19, 1980	190	450	80	360	70	350	70
May 2, 1980	130	910	100	380	80	260	80
May 8, 1980	260	670	00	310	90	130	80
May 16, 1980	100	880	80	520	130	200	80
May 23, 1980	170	850	80	820	100	250	90
May 30, 1980	140	950	100	670	120	270	90
June 6, 1980	200	710	80	580	80	370	100
June 13, 1980	220	1480	110	490	80	320	80
June 20, 1980	190	1310	103	460	70	120	60
June 27, 1980	230	1900	190	510	130	250	90
July 7, 1980	240	2130	210	560	130	290	90
July 18, 1980	160	1930	190	420	120	250	90
July 25, 1980	180	1360	140	440	120	280	90
July 30, 1980	190	1800	180	410	70	240	90
August 6, 1980	180	3010	300	500	130	370	110
August 13, 1980	130	3050	400	930	90	270	90
August 20, 1980	130	4480	270	1060	100	430	90
August 27, 1980	180	4380	280	970	150	460	90
September 3, 1980	600	4940	300	1030	130	600	90
September 10, 1980	240	4800	260	930	100	280	80
September 17, 1980	370	3540	350	730	110	290	90
September 24, 1980	920	1770	180	730	110	290	90
October 1, 1980	170	3640	360	730	110	290	90
October 8, 1980	190	3640	360	730	110	290	90

POOR ORIGINAL

Table 1 (cont'd)

REPORT NO. 18
DATE: March 19, 1981
PAGE 3 OF 3

OPU ENVIRONMENTAL CONTROLS GROUP
TRITIUM CONCENTRATION (PCI/L)

DATE	M.U. 1	M.U. 2	M.U. 3	M.U. 4	M.U. 5	M.U. 6	M.U. 7	M.U. 8
October 15, 1980	174	3520	530	1770	270	740	120	200
October 22, 1980	164	2920	440	1870	280	780	120	200
October 29, 1980	164	3170	480	1670	250	610	120	300
November 5, 1980	164	2080	310	1620	240	570	160	250
November 12, 1980	164	2400	360	2050	310	740	120	100
November 19, 1980	270	2680	200	2250	140	500	100	310
November 26, 1980	120	2950	440	3620	540	310	90	170
December 3, 1980	250	3410	230	2120	180	450	70	280
December 10, 1980	110	2750	410	2030	300	470	100	270
December 17, 1980	130	2110	320	2380	360	420	100	300
December 24, 1980	140	2610	300	300	90	310	90	230
December 31, 1980	170	2480	370	2220	330	310	90	260
January 7, 1981	100	2700	200	830	140	340	90	260
January 14, 1981	160	2180	180	2260	180	360	90	310
January 21, 1981	180	2080	130	2090	310	340	90	270
January 28, 1981	220	1990	140	2190	330	420	100	210
February 4, 1981	130	2560	160	1580	240	300	90	280
February 11, 1981	140	2360	190	1900	290	360	90	350

W. J. H.

POOR ORIGINAL

Table 2

REPORT NO. 18
 DATE: March 20, 1981
 PAGE 1 OF 2

GPU ENVIRONMENTAL CONTROLS GROUP
 TRITIUM CONCENTRATION (PCI/L)

DATE OF SAMPLE	O.U. 9	O.U. 10	O.U. 13B	O.U. 14	O.U. 15	O.U. 16	O.U. 17
	M-3	M-3	M-3	M-3	M-3	M-3	M-3
April 25, 1980	2610	1480	104				
May 2, 1980	350	90	170			1090	110
May 8, 1980	320	70	430	1320	200	90	110
May 16, 1980	440	80	350	70	440	70	110
May 23, 1980	290	100	360	110	360	110	80
May 30, 1980	360	110	430	120	400	130	110
June 6, 1980	370	110	390	110	350	80	110
June 14, 1980	270	100	460	80	300	90	590
June 20, 1980	320	110	380	110	350	120	80
June 27, 1980	490	80	310	90	390	60	760
July 7, 1980	550	110	910	90	410	80	580
July 18, 1980	500	130	680	120	370	120	680
July 25, 1980	490	120	340	110	290	130	720
July 30, 1980	550	130	880	80	350	130	710
August 8, 1980	410	120			180	80	700
August 13, 1980	570	130			220	90	800
August 20, 1980	810	80			420	120	950
August 27, 1980	2420	240	1900	190	320	110	960
September 3, 1980	910	90	1950	200	340	110	1100
September 10, 1980	1180	100	830	110	520	120	1180
September 17, 1980	1950	100	590	80	400	100	1400
September 24, 1980	1320	100	330	70	930	110	1610
October 1, 1980	1270	100			260	80	1370
October 8, 1980	1280	130			150	80	1270
October 15, 1980	1240	180	1600	110	510	100	1270
October 22, 1980	1240	180	1600	110	510	100	1270

POOR ORIGINAL

Table 2 (cont'd)

REPORT NO. 18	DATE: March 28, 1981	DATE	O.U. 9	O.U. 10	O.U. 13B	O.U. 14	O.U. 15	O.U. 16	O.U. 17	
H-3	H-3	H-3	H-3	H-3	H-3	H-3	H-3	H-3	H-3	
GPU ENVIRONMENTAL CONTROLS GROUP										
TRITIUM CONCENTRATION (PCI/L)										
October 22, 1980	2078	310	299	80	550	100	850	140	4070	810
October 29, 1980	618	120	350	50	550	100	1200	190	4170	630
November 5, 1980	1554	250	1100	170	450	100	1650	250	3520	590
November 12, 1980	1520	240	2670	220	310	90	1450	220	4140	280
November 19, 1980	790	90	2600	160	140	100	1500	110	4470	290
November 26, 1980	340	90	830	140	210	80	1620	240	4690	700
December 3, 1980	1040	80	1080	120	340	60	1500	140	5070	300
December 10, 1980	1000	150	1300	200	260	80	3200	480		
December 17, 1980	1340	200	1350	200	280	80	3010	450		
December 24, 1980	1740	200	1060	160	290	80	3050	460		
December 31, 1980	780	120	1390	210	300	90	3630	540		
January 7, 1981	770	120	1510	240	240	80	1480	220	3830	570
January 14, 1981	1160	170	2360	350	370	90	1820	270	3850	580
January 21, 1981	1310	200	1910	200	290	80	1430	210	2800	420
January 28, 1981	1180	180	1570	240	320	90	1840	280	4100	620
February 4, 1981	790	120	900	110	270	90	1300	200	4000	610
February 11, 1981	1010	120	590	80	360	90	1370	210	3860	190

W. J. T. N.

W. J. T. N.

POOR ORIGINAL

Table 3

REPORT NO. 12		DATE: March 20, 1981		PAGE 1 OF 1							
GPU ENVIRONMENTAL CONTROLS GROUP											
CESIUM-137 CONCENTRATION (PCI/L)											
DATE	M.W. 1	M.W. 2	M.W. 3	M.W. 4	M.W. 5	M.W. 6	M.W. 7	M.W. 8	M.W. 9	M.W. 10	M.W. 11
OF SAMPLE	CS-137 +/-	CS-137 +/-	CS-137 +/-	CS-137 +/-	CS-137 +/-	CS-137 +/-	CS-137 +/-	CS-137 +/-	CS-137 +/-	CS-137 +/-	CS-137 +/-
April 12, 1980			12.8	7							
May 16, 1980		9.19	4.87								
May 30, 1980	0.52	4.49									
September 10, 1980						14.2	2.8				
September 24, 1980		13.4	6.3								
October 1, 1980		34.9	6.3								
October 15, 1980					14.2	2.8					
November 18, 1980		94.7	9.5								
December 3, 1980		5.9	2.36								
December 10, 1980		39.2	4.2								
December 17, 1980		88.1	8.8								
December 24, 1980		24.1	5.9								
January 7, 1981		16.9	5.9								
January 14, 1981		81.4	7.8								
January 21, 1981		13.7	4.5								
January 28, 1981		7.7	4.36								
February 4, 1981		12.7	3.5								
February 11, 1981		371	37								
February 18, 1981		189	18.9								
February 25, 1981		58.2	5.6								
March 2, 1981		19.5	4.5								

POOR ORIGINAL

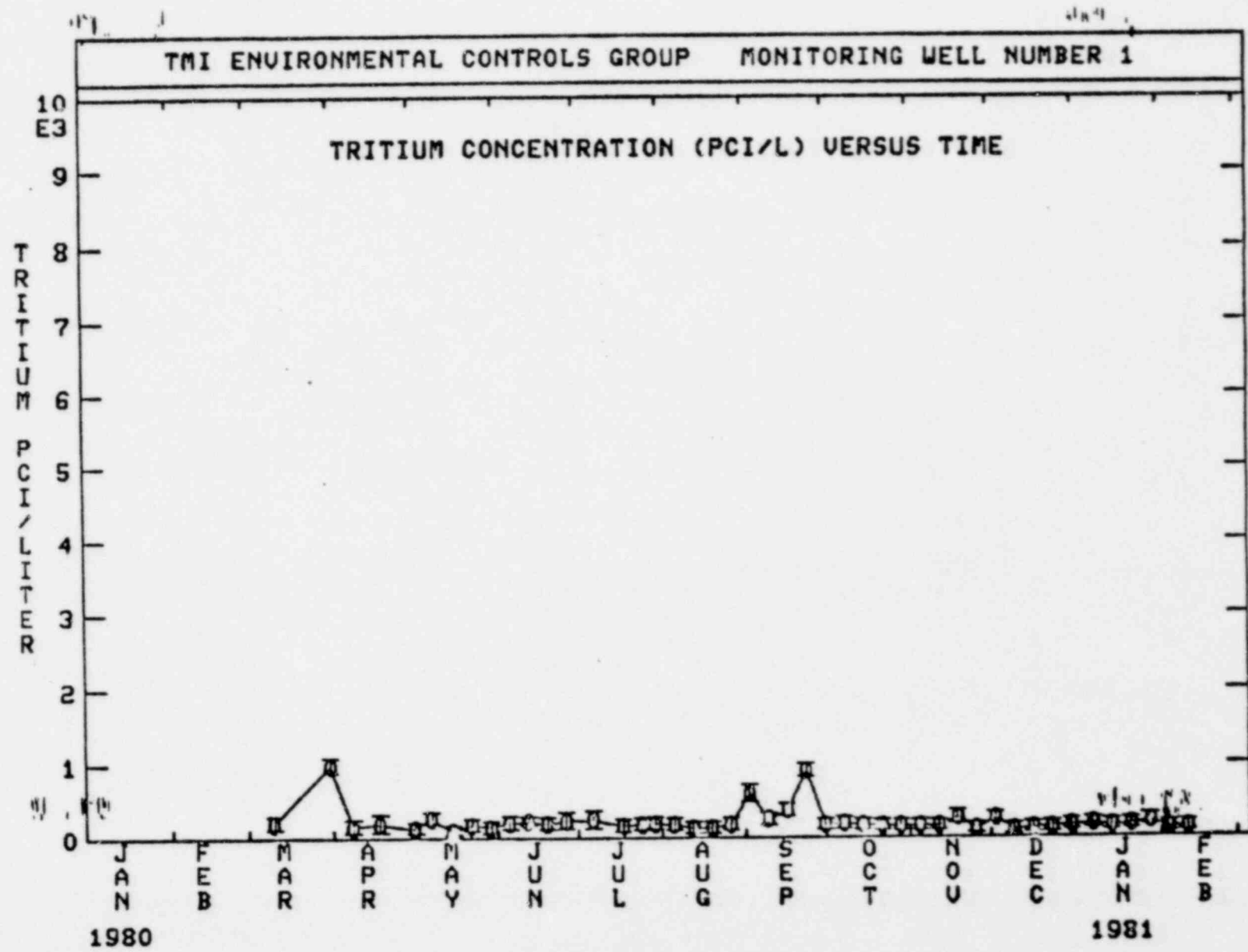
Table 4

REPORT NO. 18		DATE: March 20, 1981		PAGE 1 OF 1										
GPU ENVIRONMENTAL CONTROLS GROUP														
CESIUM-134 CONCENTRATION (PCI/L)														
DATE	M.U. 1	M.U. 2	M.U. 3	M.U. 4	M.U. 5	M.U. 6	M.U. 7	M.U. 8	M.U. 9	M.U. 10	M.U. 11	M.U. 12	M.U. 13	M.U. 14
OF SAMPLE	CS-134 +/-	CS-134 +/-	CS-134 +/-	CS-134 +/-	CS-134 +/-	CS-134 +/-	CS-134 +/-	CS-134 +/-	CS-134 +/-	CS-134 +/-	CS-134 +/-	CS-134 +/-	CS-134 +/-	CS-134 +/-
October 1, 1980		12.0	5.5											
November 12, 1980		33	6.9											
December 10, 1980		12.9	6.2											
December 17, 1980		35	4.9											
December 24, 1980		10.5	3.0											
January 7, 1981		9.68	4.28											
January 14, 1981		36.6	5											
January 21, 1981		7.71	3.62											
February 4, 1981		6.2	3.57											
February 11, 1981		134	13											
February 18, 1981		75.9	7.6											
February 25, 1981		21.8	4.1											

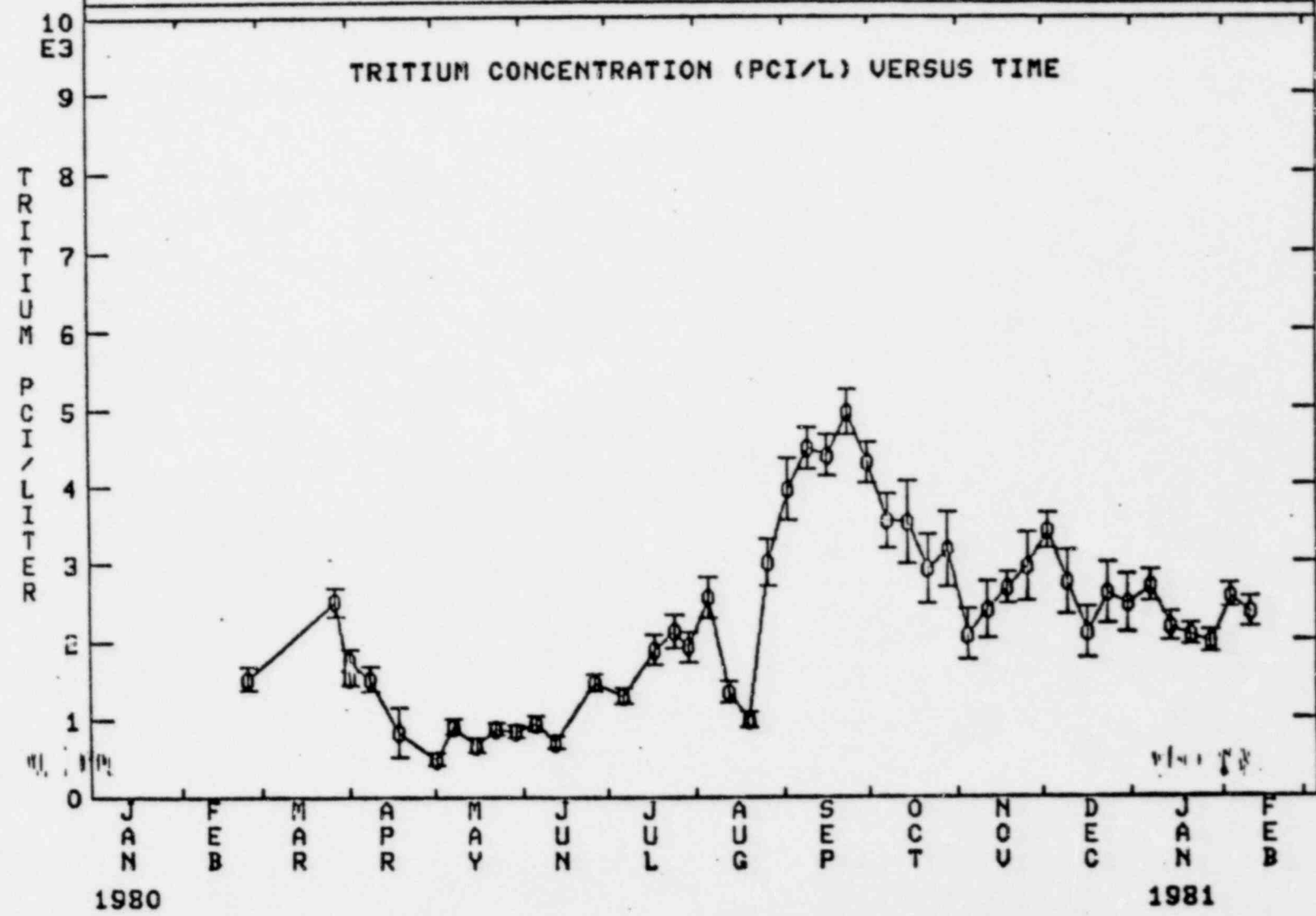
POOR ORIGINAL

U. 10

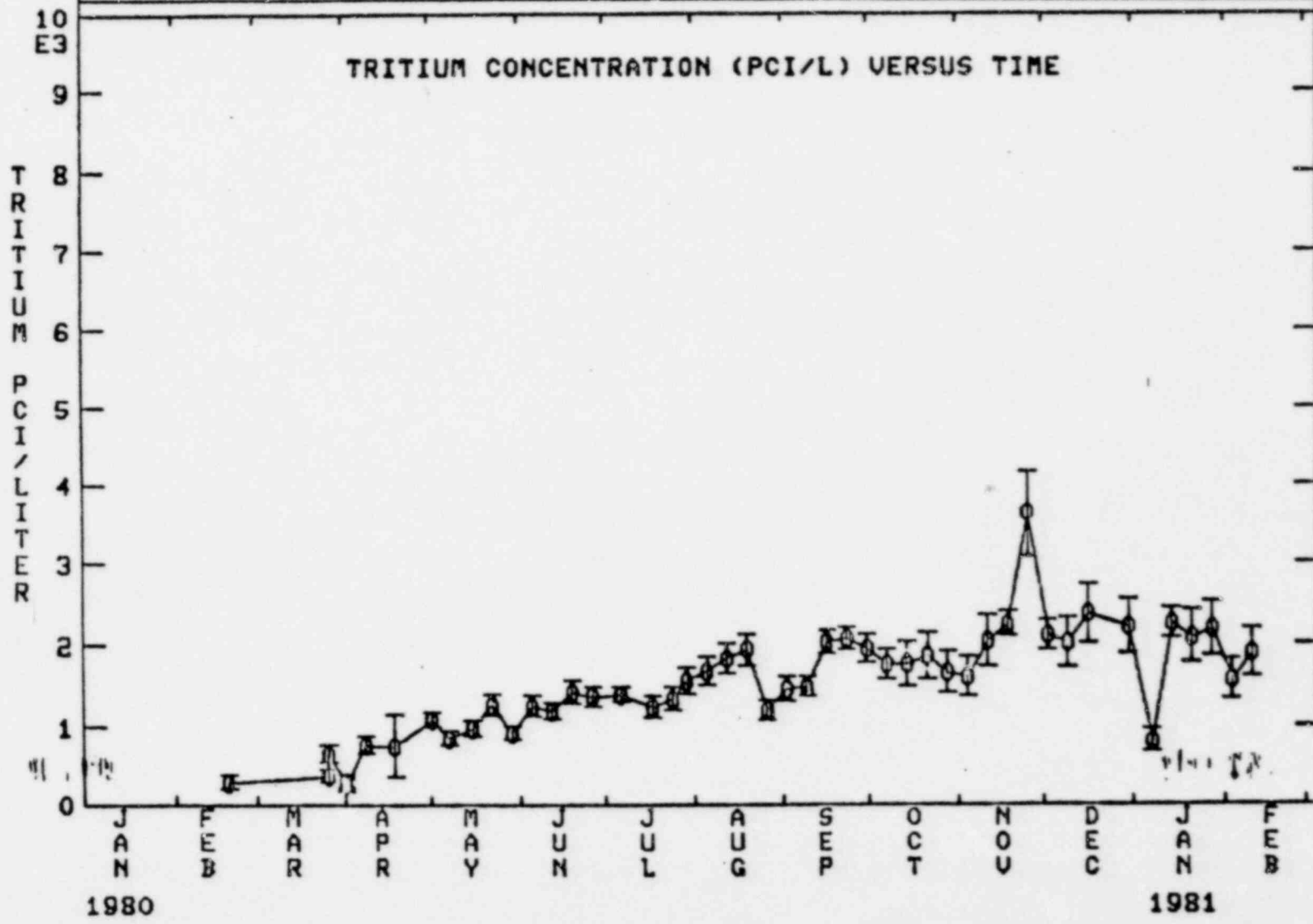
1/11/81

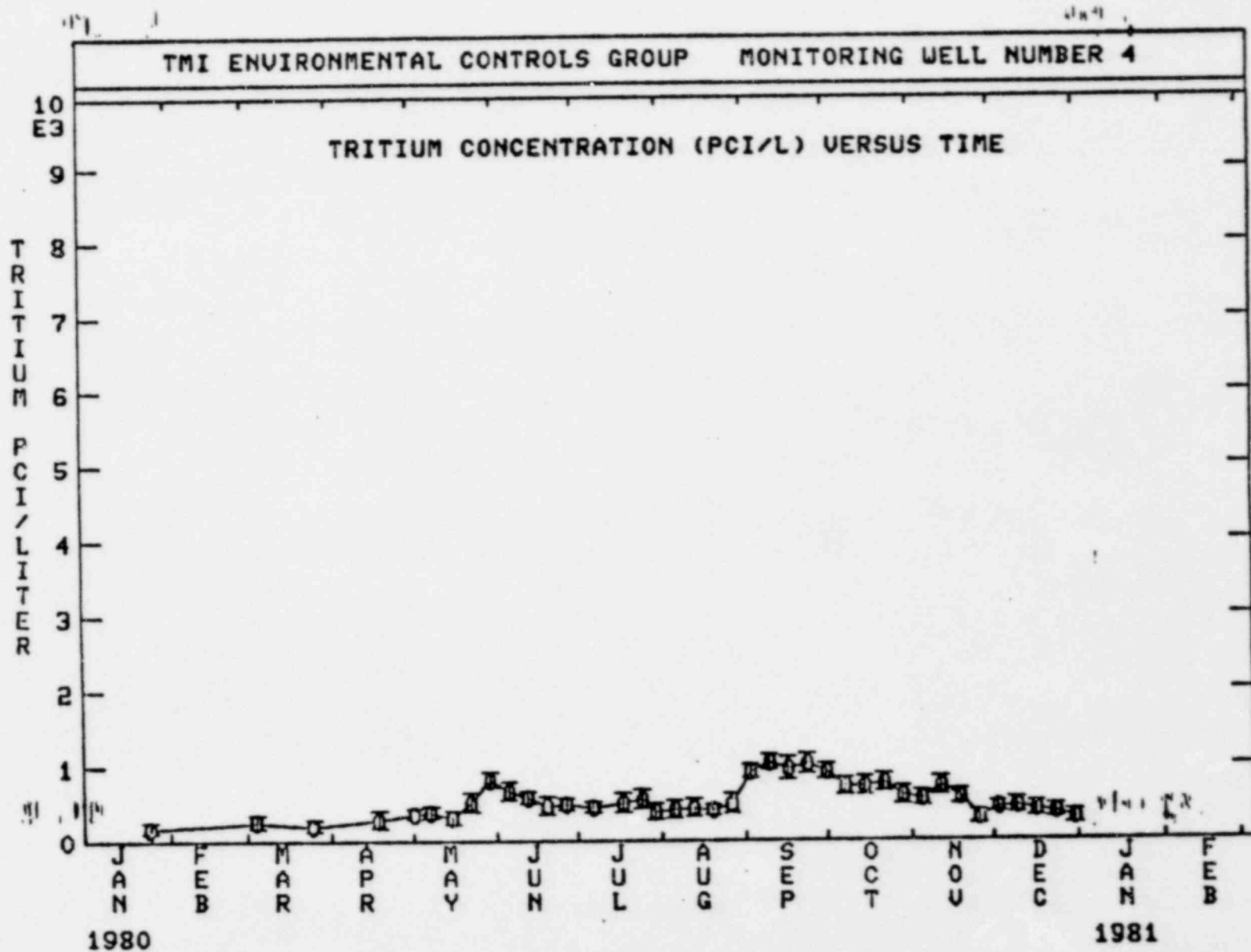


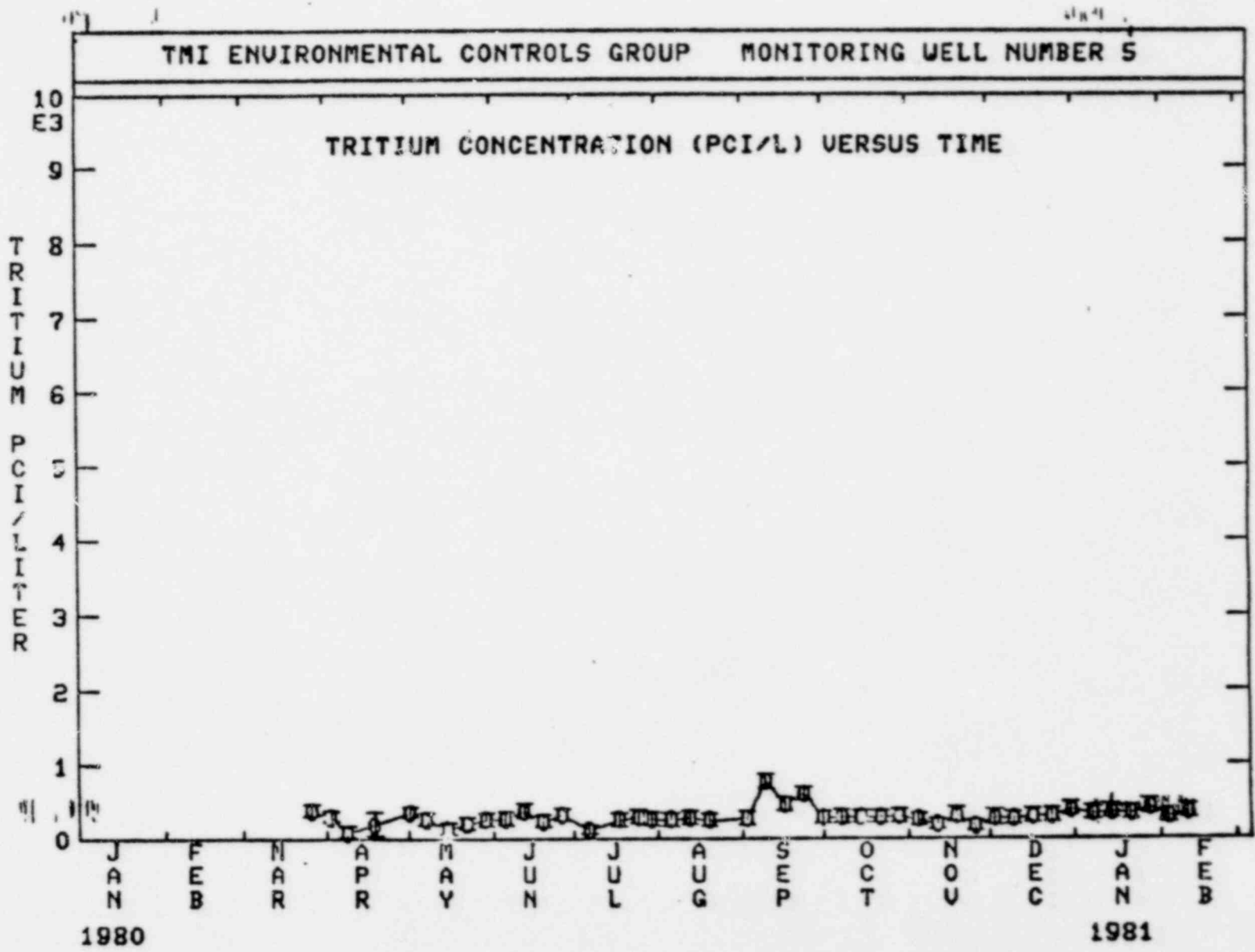
TMI ENVIRONMENTAL CONTROLS GROUP MONITORING WELL NUMBER 2

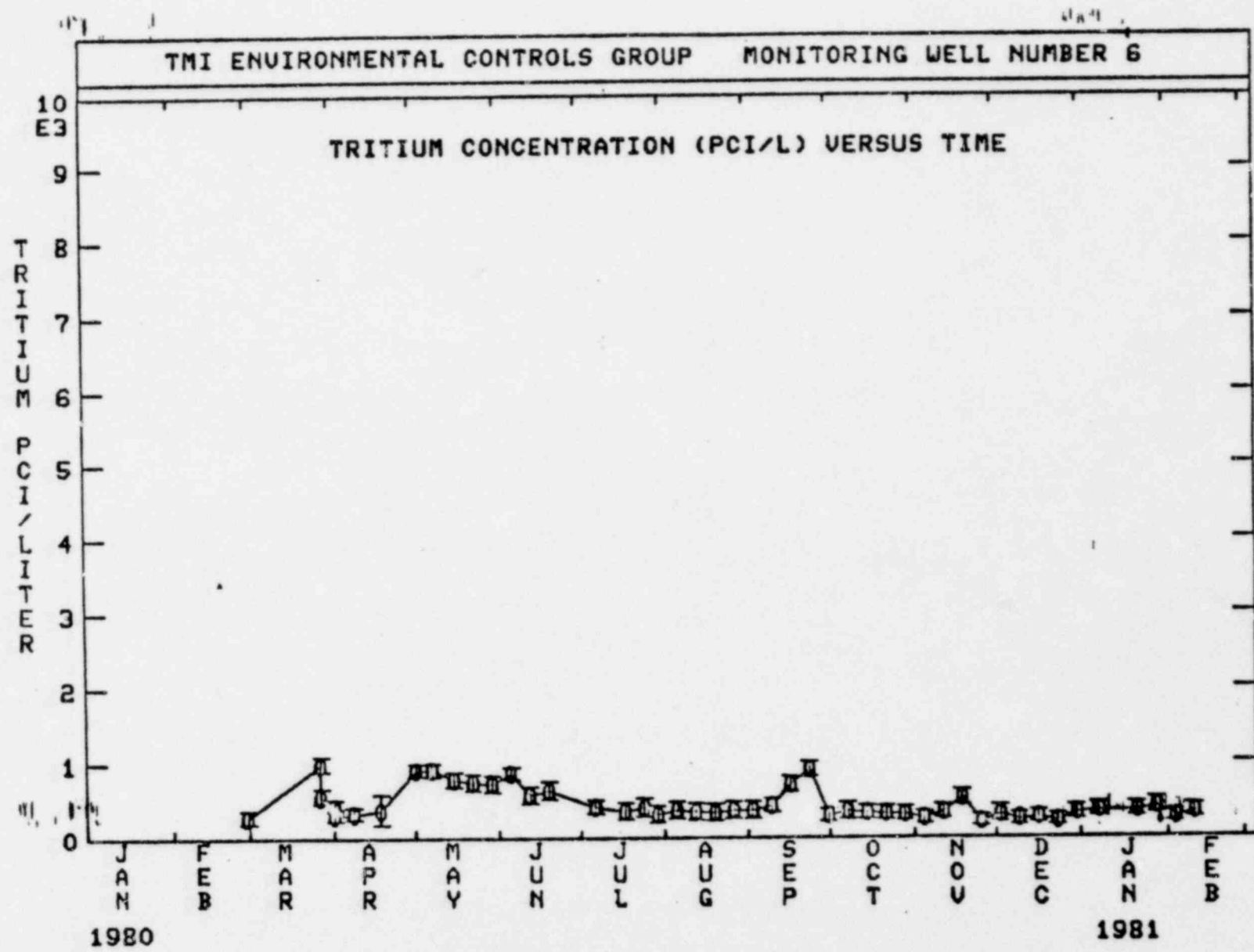


TMI ENVIRONMENTAL CONTROLS GROUP MONITORING WELL NUMBER 3

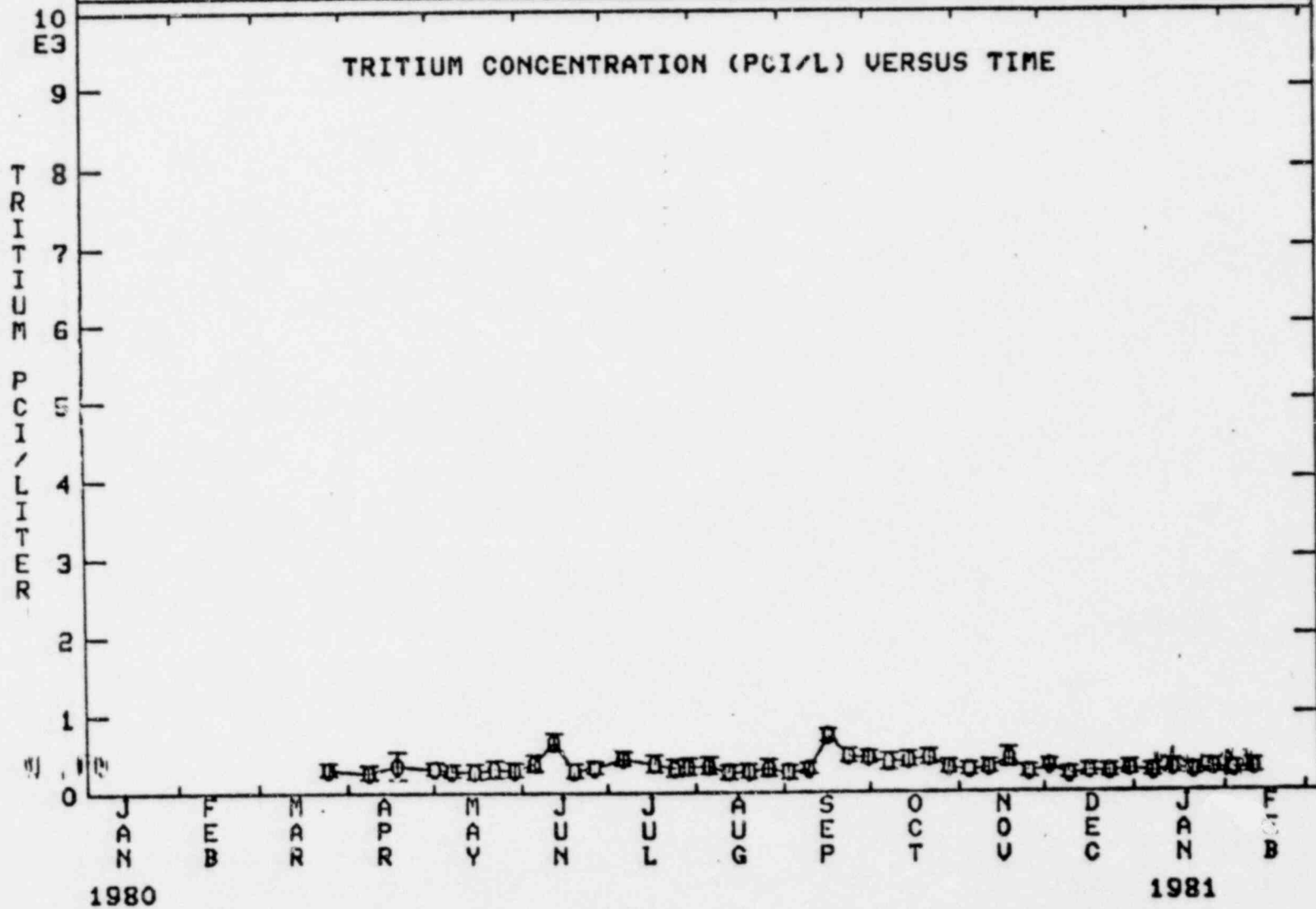




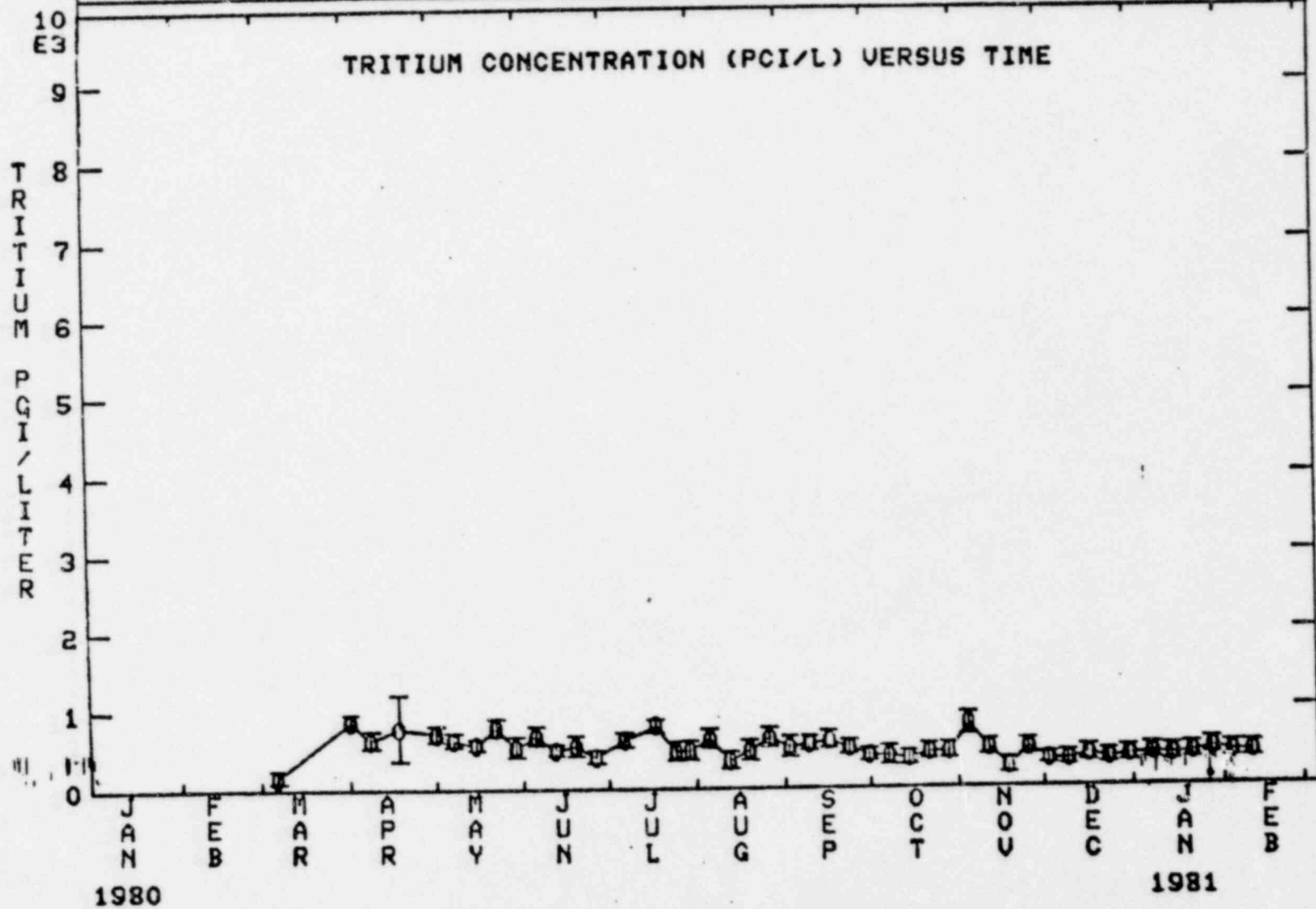




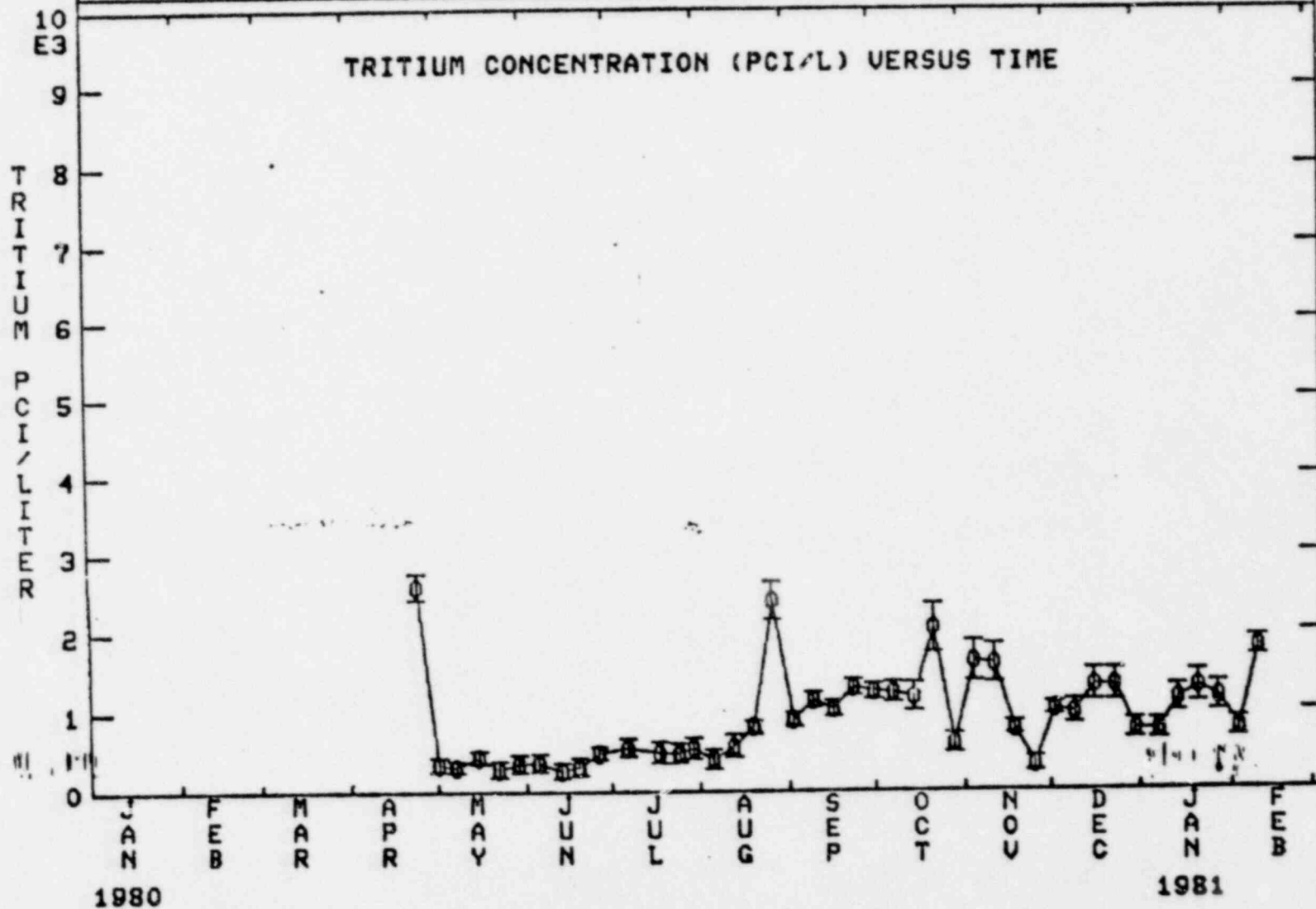
TMI ENVIRONMENTAL CONTROLS GROUP MONITORING WELL NUMBER 7



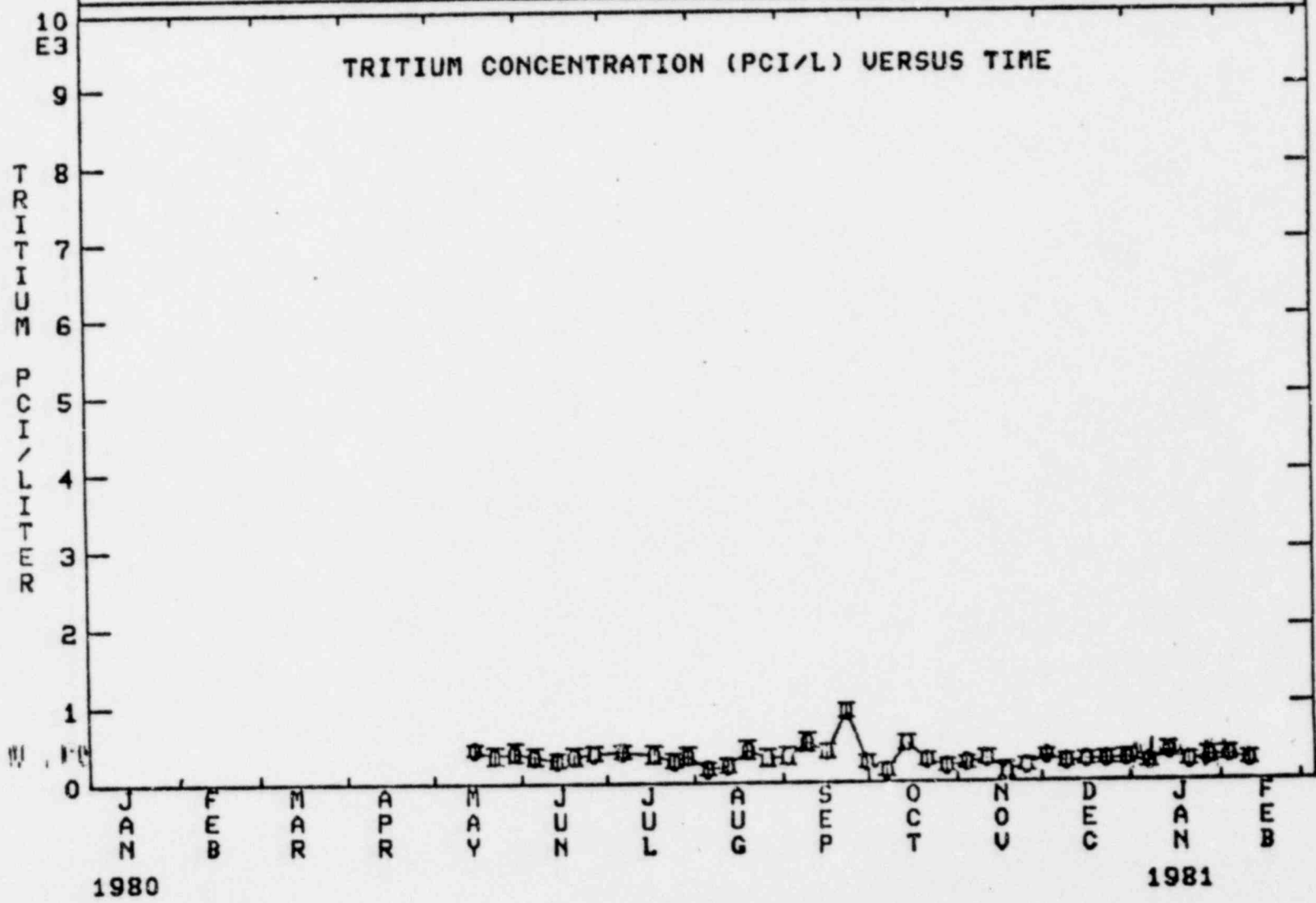
TMI ENVIRONMENTAL CONTROLS GROUP MONITORING WELL NUMBER 8



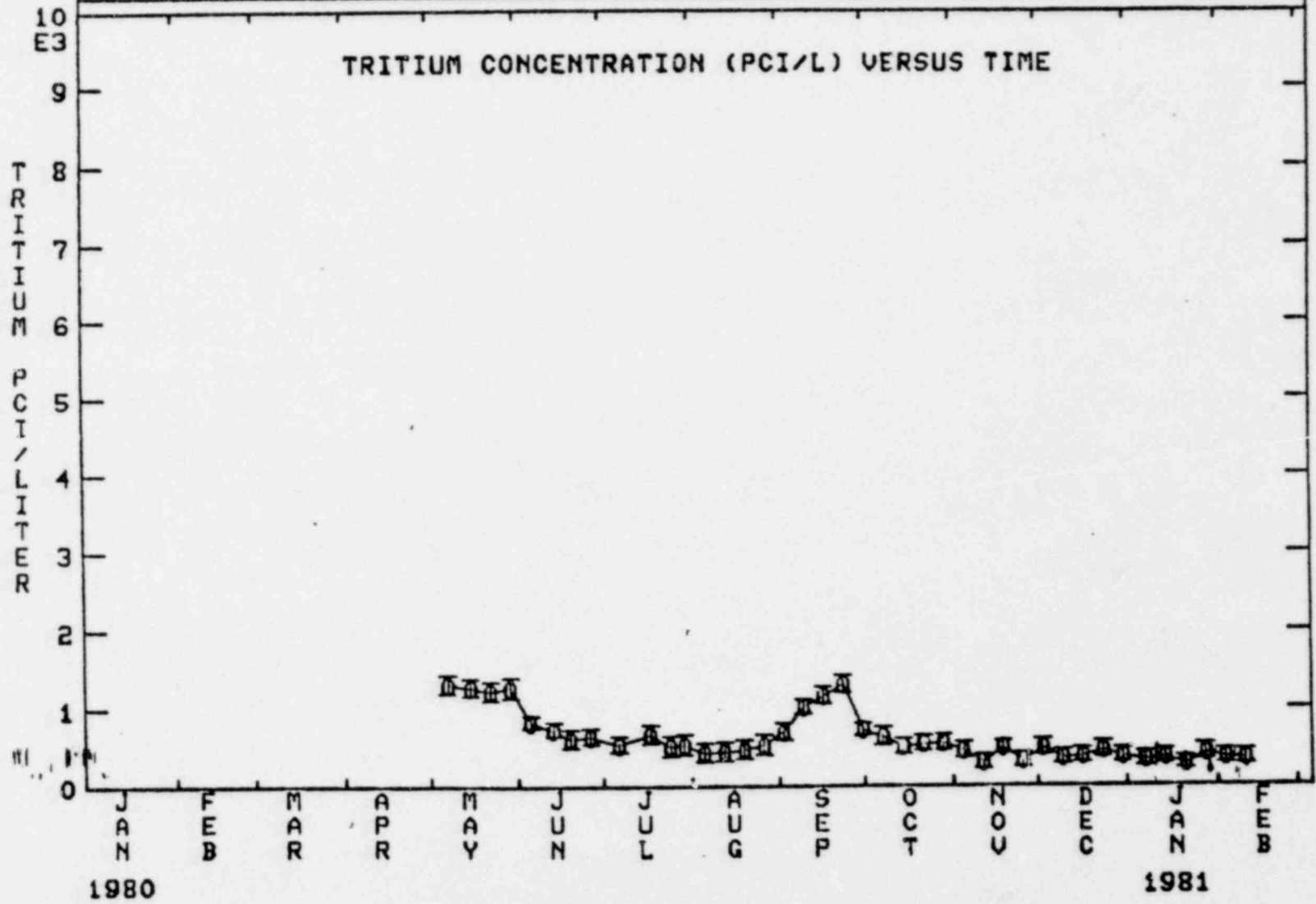
TMI ENVIRONMENTAL CONTROLS GROUP OBSERVATION WELL NUMBER 9



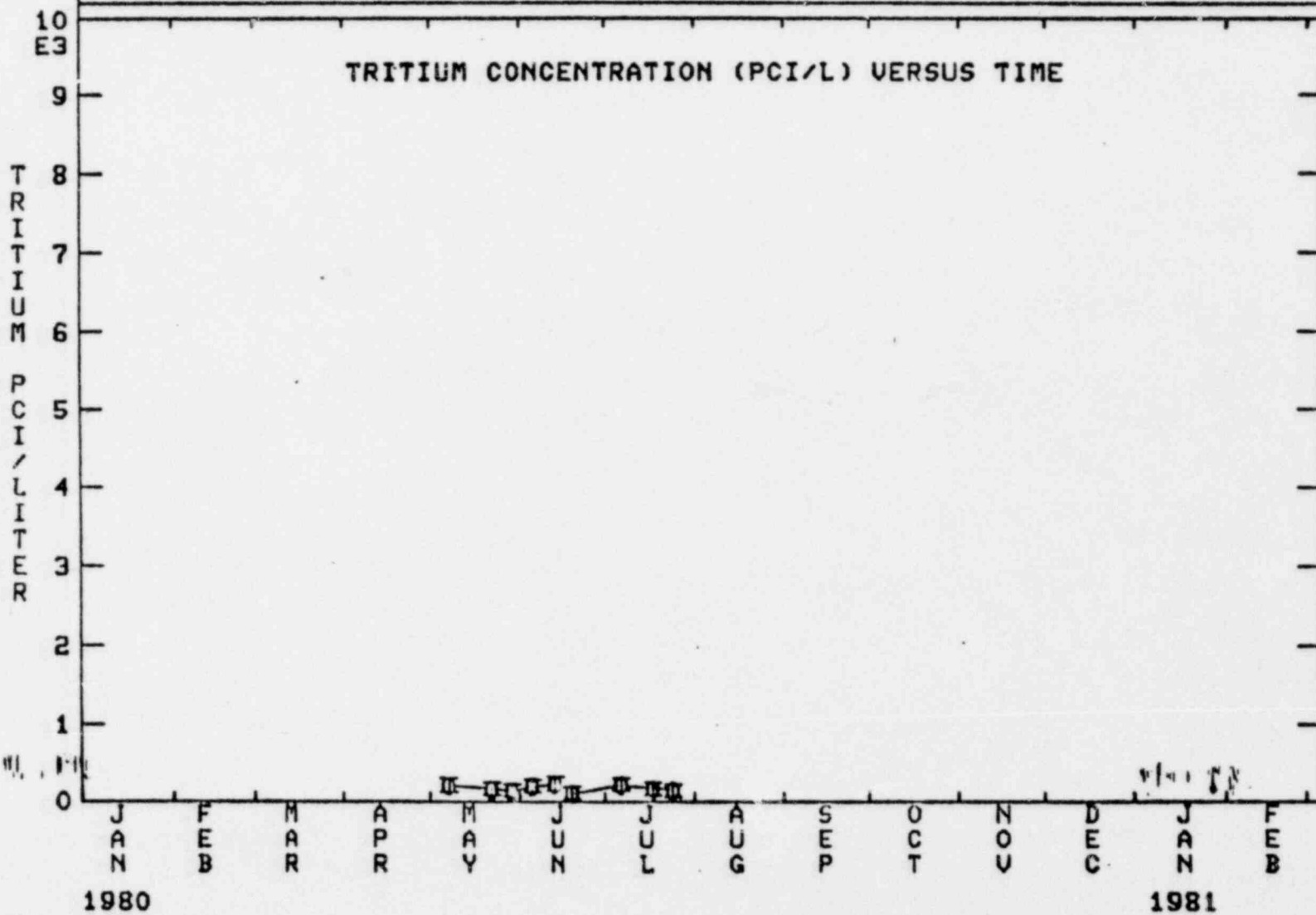
TMI ENVIRONMENTAL CONTROLS GROUP OBSERVATION WELL NUMBER 13B



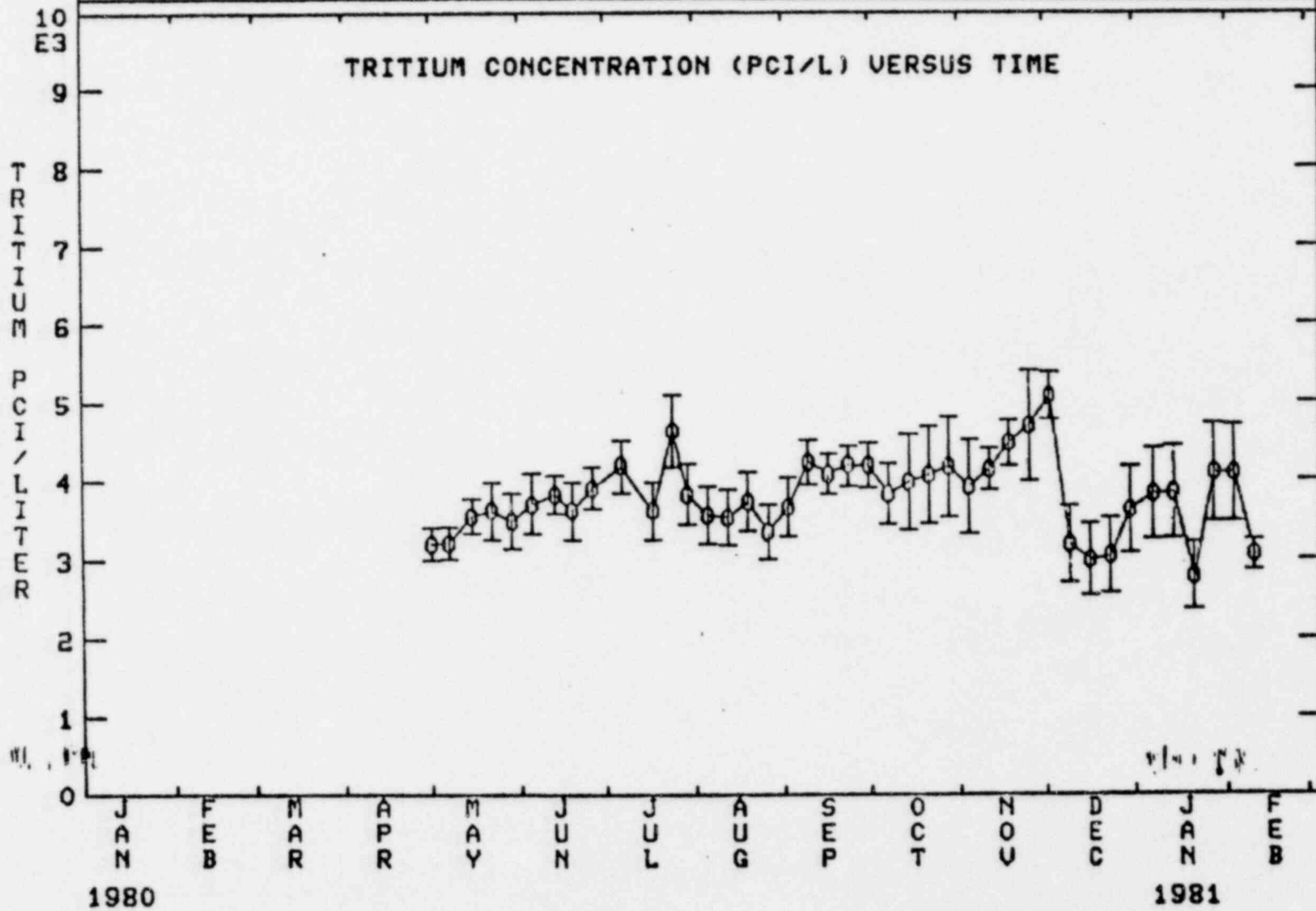
TMI ENVIRONMENTAL CONTROLS GROUP OBSERVATION WELL NUMBER 14



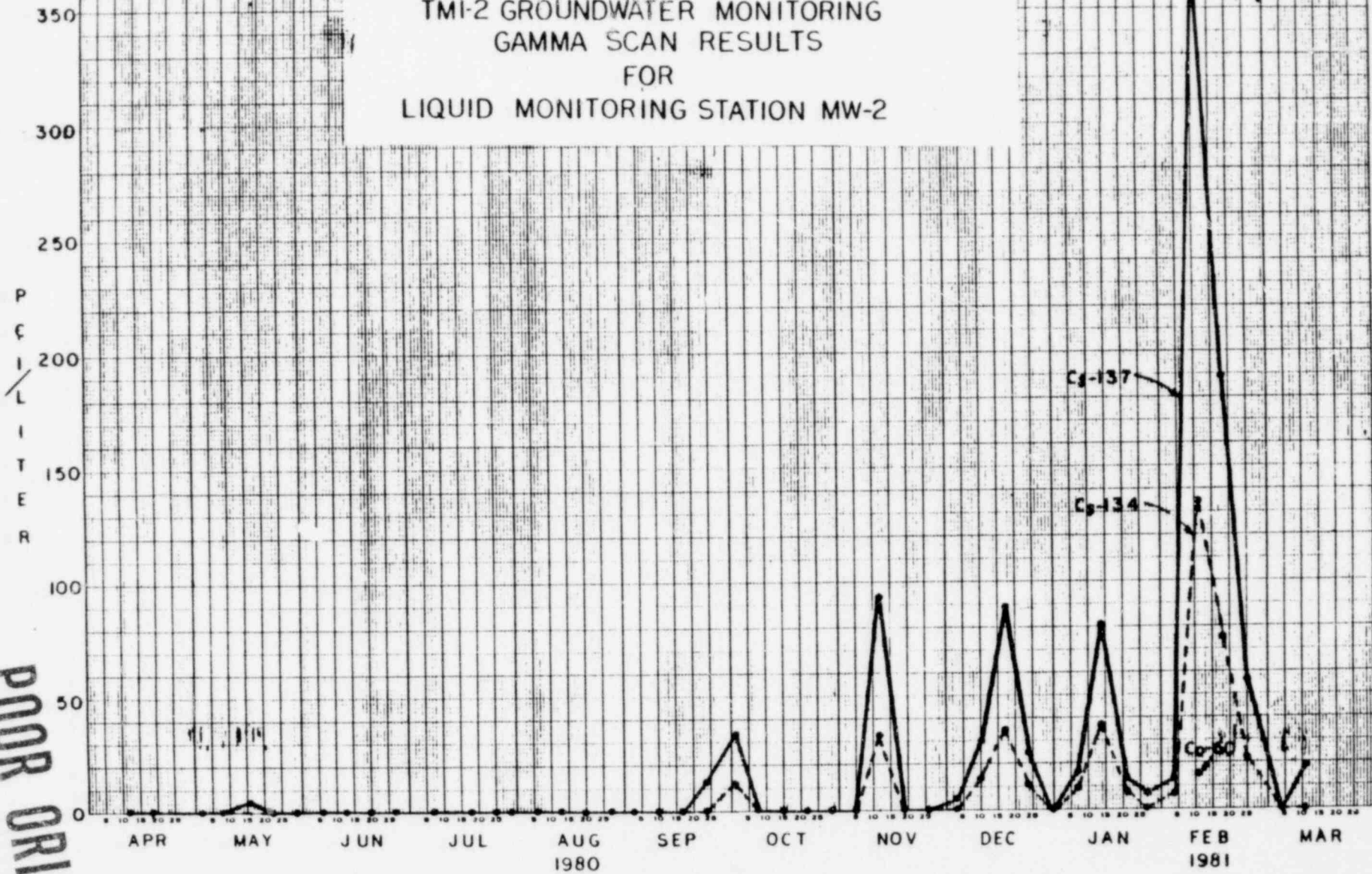
THI ENVIRONMENTAL CONTROLS GROUP OBSERVATION WELL NUMBER 15



TMI ENVIRONMENTAL CONTROLS GROUP OBSERVATION WELL NUMBER 17



CONTAINMENT INTEGRITY ASSESSMENT PROGRAM
TMI-2 GROUNDWATER MONITORING
GAMMA SCAN RESULTS
FOR
LIQUID MONITORING STATION MW-2



POOR ORIGINAL



Metropolitan Edison Company
Post Office Box 480
Middletown, Pennsylvania 17057

Writer's Direct Dial Number

April 9, 1981
LL2-81-0090

1981 APR 13 AM 10 46
U.S. NUCLEAR
REGULATORY COMMISSION

TMI Program Office
Attn: Mr. Lake Barrett, Deputy Director
U. S. Nuclear Regulatory Commission
c/o Three Mile Island Nuclear Station
Middletown, Pennsylvania 17057

Dear Sir:

Three Mile Island Nuclear Station, Unit 2 (TMI-2)
Operating License No. DPR-73
Docket No. 50-320
Groundwater Monitoring Program

The following groundwater monitoring data are attached:

1. Computer tables (Tables 1 and 2) of all tritium data up to and including February 11, 1981.
2. Computer tables (Tables 3 and 4) of gamma scan data up to and including March 11, 1981.
3. Individual computer graphs of tritium concentration for each monitoring station.
4. A graph showing the gamma scan results from Monitoring Station MW-2.
5. A composite drawing showing all monitoring station locations with a graph of the tritium concentration for each station.

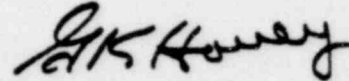
Groundwater level data and precipitation data are being prepared in computer storage so that computer tables and graphs of this date can be supplied in future reports.

There was no substantial changes in the tritium concentrations over the reporting period, as is shown on the composite drawing. As shown on the gamma scan graph for Monitoring Station MW-2, the Cs-134/137 levels have substantially dropped below the peak recorded on February 11, 1981.

In order to reduce the sediment load in samples from pumped monitoring stations and to establish a uniform sampling technique, we plan to sample all monitoring stations by the bailing technique.

Also, in order to consolidate our efforts in the broad area of containment building leak detection, we plan to incorporate the Groundwater Monitoring Program into a newly formed Containment Integrity Assessment Program.

Sincerely,



G. K. Hovey
Vice-President and
Director, TMI-2

GKH:JJB:djb

Attachments

cc: Dr. B. J. Snyder, Program Director-TMI Office